## **ABSTRACT**

A ground wave reception antenna unit is provided, in which a directional gain during the reception of a vertically polarized wave does not decrease. The antenna unit comprises a planar antenna positioned inclining from a vertical direction and a reflector positioned in a horizontal direction or inclining from a horizontal direction by a predetermined angle with being spaced from the planar antenna by a predetermined distance. The reflector is positioned in close proximity to the planar antenna, or is positioned at a distance of integer multiples of  $0.5\lambda$ , wherein  $\lambda$  is a wavelength of a ground wave received by the planar antenna.